

## THE MEDICINAL AND POISONOUS STERCULIADS OF INDIA.

BY

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The STERCULIACEÆ are herbs, shrubs or trees, sometimes lianes, which belong to tropical and subtropical regions. There are 660 species, distributed into 48 genera.

They contain an abundant mucilage, combined in the old bark of the woody species with a bitter astringent extractable matter, and exhibit stimulant and emetic properties. Many yield gums which in their appearance resemble tragacanth, and are reputed tonic. The fruit is often astringent and antidiysenteric. The seeds may be diuretic and have a stimulating effect on the central nervous system.

Among the products isolated we may mention :—(1) glucosides—kolatin—; (2) tannins—kolatannin—; (3) gums; (4) alkaloids—cafeine, theobromine—; (5) acids—tartaric—; (6) amino-acids—asparagin—; (7) fats and carbohydrates.

The medicinal and poisonous Sterculiads of the world belong to 23 genera :—ABROMA (tropical Asia to Australia); BUETTNERIA (tropical); COLA (Africa); DOMBEYA (Africa, Madagascar); ERIOLAENA (Indomalayan); FREMONTIA (California); GUAZUMA (tropical America); HELICTERES (tropics, except Africa); HERMANNIA (tropical and subtropical, chiefly Africa); KLEINHOVIA (tropical Asia); LEPTONYCHIA (tropical Africa and Asia); MAHERNIA (Africa); MELOCHIA (tropical); MYRODIA (tropical); PENTAPETES (Indomalayan); PTEROCYMBIUM (Burma, Malaya); PTEROSPERMUM (tropical Asia); PTERYGOTA (tropical); SCAPHIUM (Burma, Malaya, Borneo); STERCULIA (tropical); TARRIETIA (Eastern Asia, Australia); THEOBROMA (tropical America); WALHERIA (tropical America).

The medicinal and poisonous Sterculiads of India belong to 16 genera :—ABROMA, BUETTNERIA, ERIOLAENA, GUAZUMA, HELICTERES, KLEINHOVIA, MELOCHIA, PENTAPETES, PTEROCYMBIUM, PTEROSPERMUM, PTERYGOTA, SCAPHIUM, STERCULIA, TARRIETIA, THEOBROMA, WALHERIA.

- A. Flowers unisexual; petals none; stamen-column with anthers on the apex, clustered or in a ring.
  - I. Ovarian cells 1-ovuled; fruit of thick samaras with foliate wings ... ... ... TARRIETIA.
  - II. Ovary with 2 or more ovules in each cell; fruit dehiscent
    - 1. Radicle remote from the hilum. Follicles coriaceous or woody ... ... ... STERCULIA.
    - 2. Radicle next the hilum.
      - a. Follicles woody. Seeds many, winged at the apex, albuminous ... PTERYGOTA.